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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 09/837,503 Confirmation No. 8044  
Applicant : Vincent M. Callaghan et. al.  
Filed : April 18, 2001  
TC/A.U. : 1764  
Examiner : Jennifer A. Leung  
Docket No. : 01-104  
Customer No. : 34704

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313

Reply Brief

Dear Sir:

This brief is submitted in reply to the Examiner's Answer which was mailed on April 27, 2009.

In the Examiner's Answer, the Examiner withdrew and restated the rejections from Grounds 2, 3 and 4. The new grounds of rejection are the same as the original ones, except that the Examiner has removed reliance on Applicant's Disclosed Prior Art and renumbered those Grounds of rejection as 2', 3' and 4'.

Reply on each of these Grounds is as follows:

Ground 2'

Turning to claim 18, this claim calls for the water injection means to inject liquid phase water. The Examiner concedes that Takeu (the primary reference used to reject claim 18) does not at all disclose this subject matter. Instead, Takeu discloses a very different injection of steam, or vapor phase water. This is critically different in that the water is much more effective to cool when it is introduced in liquid phase. It is submitted that this claim limitation is in fact properly given weight in the present claim, and further that there are surprising results in using liquid phase water. The teaching of liquid phase water in other prior art patents which

have been used as secondary prior art should not be seen as evidence that a person of skill in the art would make such a modification. The Examiner paraphrases the reasons from the present specification as to why liquid phase water is desired and then relies upon these reasons to conclude that this subject matter is obvious based upon the teachings of Takeu. Reversal of this rejection for this reason is believed proper and earnestly solicited.

Still dealing with this ground of rejection, the control feature also supports patentability. The Examiner withdrew reliance on Applicant's "Disclosed Prior Art" (ADPA), and stated that Appellant had not addressed the Giles prior art.

Giles was cited as teaching a control unit in a catalyst bed system. Because of the different environment of use and the lack of teaching in either reference that such a system would be useful in a fuel cell power plant, it is submitted that this prior art teaches nothing more than had been asserted as taught in the earlier relied upon ADPA. Giles confirms that flow control systems based upon temperature measurements exist, in other and very different fields of use.

Appellants contend that neither Takeo nor Giles contains any teaching which would lead a person skilled in the art to expect that beneficial results could be obtained by using the flow control system of Giles in Takeo. The use of such control systems as claimed in the present application is different from each of Takeo and Giles. Takeo does not disclose or suggest a flow control member for controlling the injection of steam as contemplated therein. Giles does not disclose anything which would lead the person of skill in the art to believe that Giles contains any relevant teachings. It is submitted, in fact, that Giles is from a different field of endeavor, and directed to a different problem to be solved than Takeo or the claimed

invention. Therefore, it is submitted that a person skilled in the art would not consult Giles when considering systems such as that of the present claims, and further that if such skilled artisan did consult Giles, there would be no expectation that the Giles control system could be successfully incorporated into the system of Takeo.

Reversal for this reason is again respectfully solicited.

#### Ground 3'

The Examiner has also rejected claim 6 as obvious over a combination of prior art based upon Takeu. The same reasoning supporting reversal of the rejection of claim 6 in Ground 1 applies here. The combination of art does not at all suggest the placement of the selective oxidizer relative to the water injection point. Reversal of this rejection is earnestly solicited.

#### Ground 4'

Claims 8-10 depend from claim 18 and are believed allowable based upon the arguments set forth in Ground 2. In addition, claim 8 calls for means for atomizing, and the Examiner has added Fleischli as teaching this subject matter. While Fleischli may teach a structure which atomizes a stream of liquid, it is submitted that nothing in the art of record would lead a person of skill in the art to combine this structure into the water feed zone of the present claims, and therefore that this rejection is not proper under 35 USC 103 and should be reversed.

It is believed that no fee is due in connection with this paper. If, however, any such fee is due, please charge same to Deposit Account No. 02-0184.

Respectfully submitted,

By 

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Date: June 29, 2009      Email: docket@bachlap.com

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Reply' Brief dated June 29, 2009

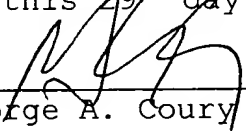


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George A. Coury